

Field Service Procedure

PEEP/Pmax Valve Replacement and Adjustment Anesthesia



Revision A
3/10/04
SP00311

Service Procedure

PEEP/Pmax Valve Replacement and Adjustment

PEEP/PMAX VALVE REPLACEMENT AND ADJUSTMENT

1 Preparing the Breathing System

1. Set machine power switch to the Off position and close all flow control valves.
2. Disconnect the PEEP/Pmax hose from its valve dome.
3. Using a two-hole spanner wrench (7910305) remove the PEEP/Pmax valve dome from the breathing system. See [Fig. 1](#).

2 Replacing the PEEP/Pmax Valve

1. Remove the existing PEEP/Pmax valve assembly and install the replacement assembly as shown in [Fig. 1](#).



NOTE

Ensure that the valve assembly is properly seated in the valve crater.



NOTE

Should the new valve become disassembled in shipment, refer to [Fig. 2](#) for the correct arrangement of its parts.

2. Reinstall the PEEP/Pmax valve dome on the breathing system and tighten. Reconnect the PEEP/Pmax hose to the hose barb on the valve dome.

2.1 Performance Tests

1. Set machine power switch to the On position, and perform the PMS test steps outlined in the following sections of the Service Manual:

Fabius GS

- 7.6 Calibration
- 7.9 Breathing System
- 7.21 Ventilator

Fabius Tiro

- 8.6 Calibration
- 8.9 Breathing System
- 8.21 Ventilator

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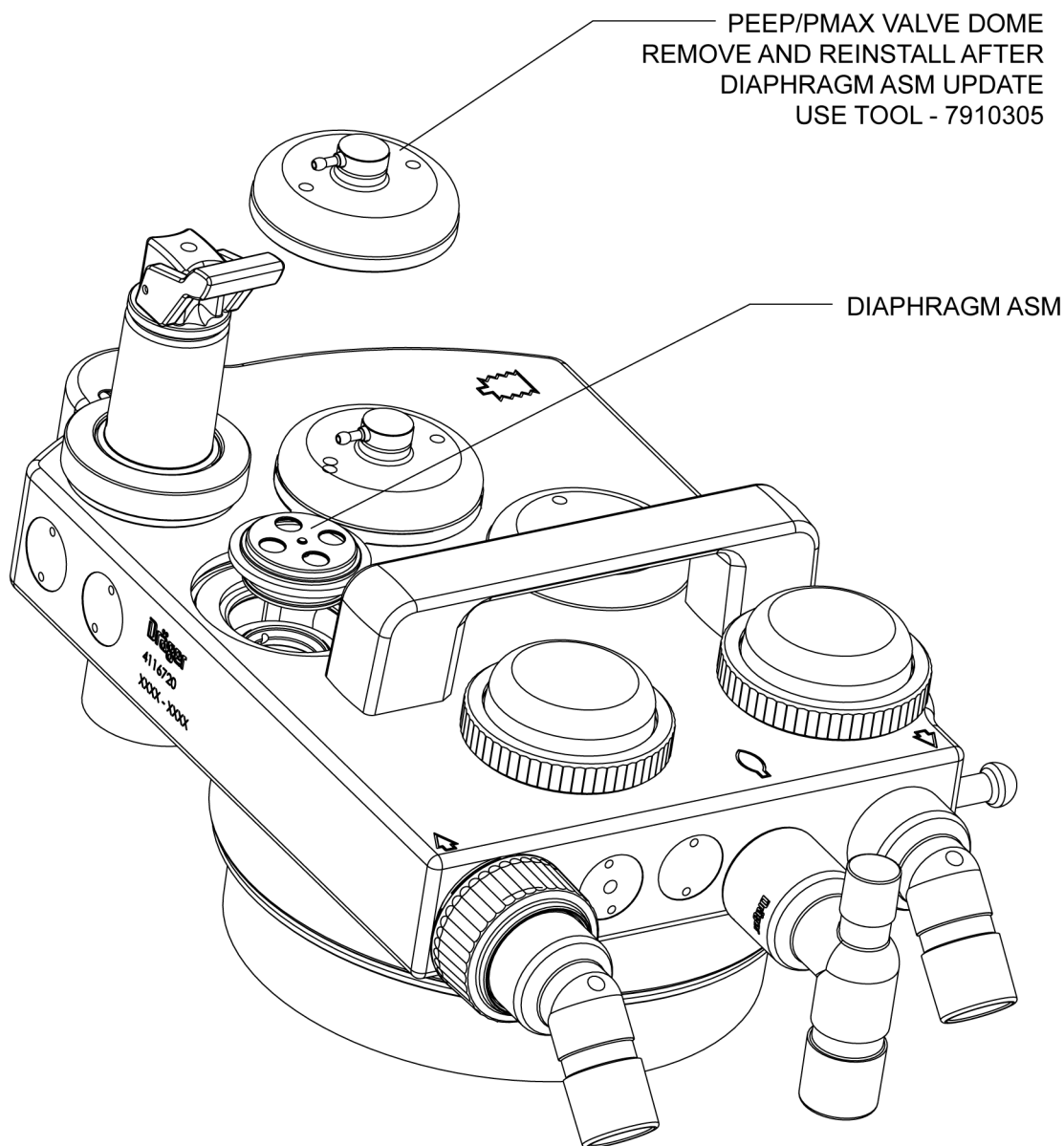


Fig. 1 PEEP/Pmax Valve Replacement

Service Procedure

PEEP/Pmax Valve Replacement and Adjustment

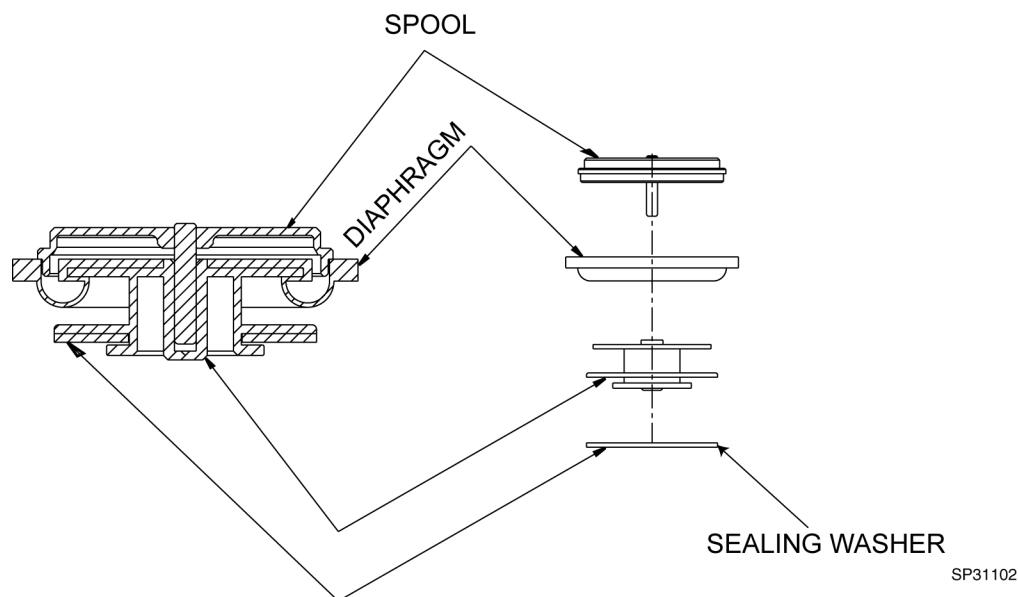


Fig. 2 PEEP/Pmax Valve Diaphragm Arrangement



NOTE:

If PEEP/Pmax valve readings are out of specification, proceed to [PEEP/Pmax Valve Adjustment](#) section.

3 PEEP/Pmax Valve Adjustment

1. Perform steps 2 & 3 of the [Preparing the Breathing System](#) section.
2. With only the Peep/Pmax valve dome removed from the breathing system, using the part number located on the diaphragm as a reference, note the orientation axis of the diaphragm assembly as it resides in the breathing for later re-orientation. Make a temporary indication of original axis as a reference point on the breathing system.
3. Remove the complete diaphragm assembly from breathing system and inspect the condition of the sealing washer located on the bottom of diaphragm assembly. Clean if necessary.
4. Using the part number as the reference, orient the diaphragm assembly approximately 90 degrees clockwise from the original reference point, and install. See [Fig. 3](#).
5. Reinstall the PEEP/Pmax valve dome on the breathing system and reconnect the PEEP/Pmax hose to the hose barb on the dome assembly.
6. Enter the main Service Screen and perform the Peep calibration.
7. Perform the Peep calibration. Verify Peep calibration indicates a PASS condition.

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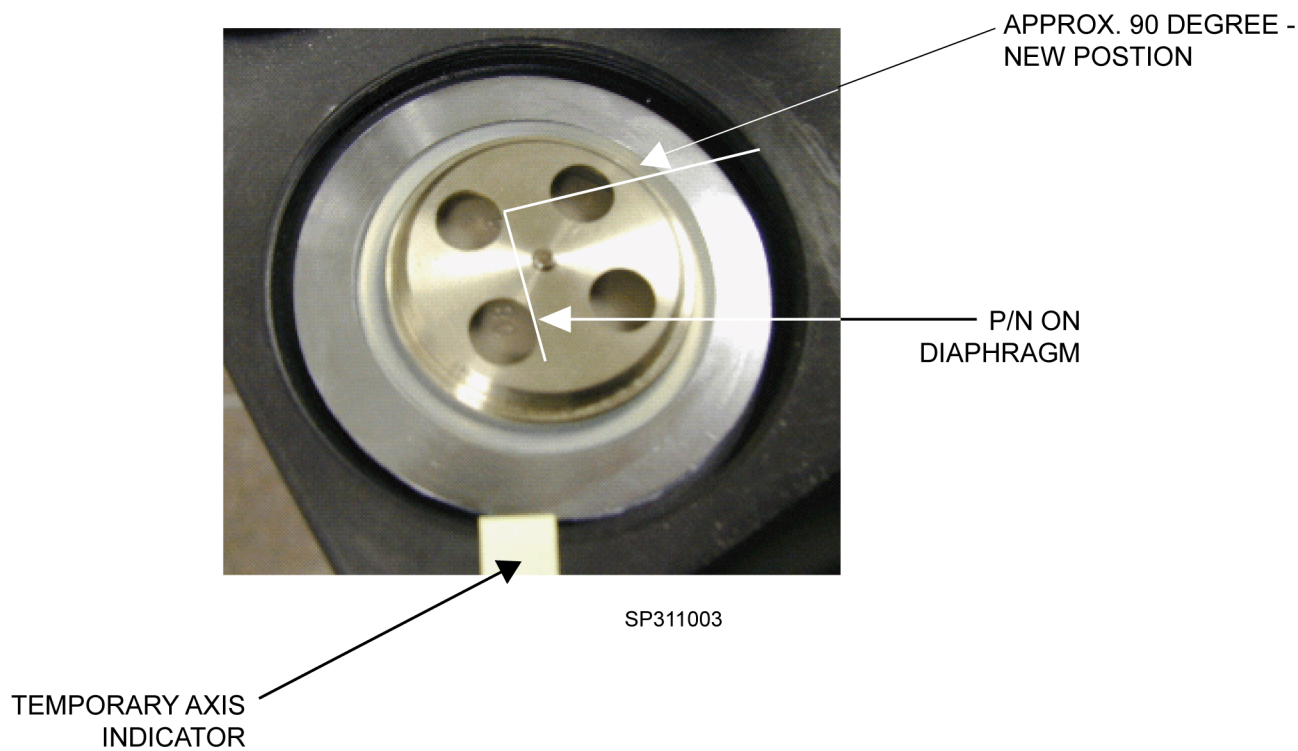


Fig. 3 PEEP/Pmax Adjustment

3.1 Performance Tests

1. Set the machine power switch to the On position and perform the PMS tests outlined in the following sections of the Service Manual:

Fabius GS

- 7.6 Calibration
- 7.9 Breathing System
- 7.21 Ventilator

Fabius Tiro

- 8.6 Calibration
- 8.9 Breathing System
- 8.21 Ventilator

2. Proceed to confirm the following settings.

- Freshgas = 3 L/min
- Pmax = 70 mbar (cmH₂O)
- Vt = 380 ml
- Freq = 4
- TI:TE = 1:4.0
- TIP:TI = 10%
- PEEP = 10 cmH₂O

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3. Via the Pressure Display, verify real time PEEP pressure is stable and does not exhibit decay during the expiratory phase.
4. Remove temporary indicator and return unit back to its' original configuration and settings.

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In the United States:
Draeger Medical, Inc.
3136 Quarry Road
Telford, PA 18969
USA

Tel: (215) 721-5402
(800) 543-5047
Fax: (215) 721-5785

PEEP/Pmax Valve Replacement en
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Subject to change without notice.
Will not be replaced in the event of modifications.

In all other countries:
Dräger Medical AG & Co. KGaA
Moislinger Allee 53 – 55
D-23542 Lübeck
Germany

Tel: (++49) (0) 1805-3723437
Fax: (++49) 451/882 - 3779